IN THE CLAIMS

Please amend the claims as follows:

1. (original) An illumination system comprising an optical waveguide (18) that is optically transparent and has an exit surface (16) and a plurality of end faces (10, 10'), opposite to at least one (10) of which a light source (12) is situated whose light is to be coupled into the optical waveguide (18) at said at least one end face (10), the optical waveguide (18) having polarizing means (30, 36, 40, 44) integrated therein for polarizing the light emitted by the light source (12), characterized in that the polarizing means (30, 36, 40, 44) comprises:

- a light guide (30) which is made of an optically transparent material and is adapted to receive said light coupled into the optical waveguide (18) at said at least one end face (10),
- a birefringent layer (36) comprising liquid crystals provided on the light guide (30) at the exit surface (16) side thereof, and
- a first electrode (40) and a second electrode (44) both having electrical contact with the birefringent layer (36) and being adapted to be connected to a voltage generator (46) by which the voltage applied between the electrodes (40, 44) and thereby the birefringent properties of the birefringent layer (36) comprising

the liquid crystals may be varied so as to control the direction of light coupled out via the exit surface (16).

2. (original) An illumination system according to claim 1, wherein the light guide (30) comprises microstructures (34, 434) provided at its interface with the birefringent layer (36).

3. (original) An illumination system according to claim 2, wherein the microstructures are chosen from grooves (34), the birefringent layer (36) occupying the space formed by the grooves (34), and ridges (434) surrounded by the birefringent layer (436).

4. (currently amended) An illumination system according to ~~any one of claims 1 to 3~~claim 1, wherein a protective cover (38) is provided on the birefringent layer (36).

5. (original) An illumination system according to claim 4, wherein at least one of the first and second electrodes (40, 44) is provided in the cover (38), on a surface (42) thereof that faces the birefringent layer (36).

6. (original) An illumination system according to claim 5, wherein both the first and the second electrode (240, 244) are

provided in the cover (238), on the surface (242) thereof that faces the birefringent layer (236).

7. (currently amended) An illumination system according to ~~any one of the preceding claims~~claim 1, wherein at least one of the first and second electrodes (240, 244) comprises a number of stripes (241, 245).

8. (original) An illumination system according to claim 7, wherein the individual stripes (352, 362, 354, 364) of said at least one of the first and second electrodes (340, 344) are electrically isolated from each other.

9. (currently amended) An illumination system according to ~~any one of the preceding claims~~claim 1, wherein at least one of the first and second electrodes (40, 44) is made of a transparent conductive material.

10. (original) A method of manufacturing polarizing means (30, 36, 40, 44) in an optical waveguide (18) that is optically transparent and has an exit surface (16) and a plurality of end faces (10, 10'), opposite to at least one (10) of which a light source (12) is adapted to be situated whose light is to be coupled

into the optical waveguide (18) at said at least one end face (10), the polarizing means (30, 36, 40, 44) being adapted to polarize the light emitted by the light source (12), characterized by the steps of:

- forming a light guide (30) of an optically transparent material for receiving said light coupled into the optical waveguide (18) at said at least one end face (10),
- forming a birefringent layer (36) comprising liquid crystals on the light guide (30) at the exit surface (16) side thereof, and
- connecting a first electrode (40) and a second electrode (44) to the birefringent layer (36) comprising the liquid crystals for controlling the direction of polarized light coupled out via the exit surface (16) by the polarizing means (30, 36, 40, 44).

11. (original) A method according to claim 10, wherein a protective cover (38) is formed on the birefringent layer (36), at least one of said first and second electrodes (40, 44) being attached to the cover (38) on a surface (42) thereof that faces the birefringent layer (36).

12. (original) A method of controlling the direction of outcoupling of polarized light from an illumination system (8) comprising an optical waveguide (18) that is optically transparent

and has an exit surface (16) and a plurality of end faces (10, 10'), opposite to at least one (10) of which a light source (12) is situated whose light is to be coupled into the optical waveguide (18) at said at least one end face (10), the optical waveguide (18) having polarizing means (30, 36, 40, 44) integrated therein for polarizing the light emitted by the light source (12), characterized by the use of a polarizing means (30, 36, 40, 44) comprising:

- a light guide (30), which is made of an optically transparent material and is adapted to receive said light coupled into the optical waveguide (18) at said at least one end face (10),
- a birefringent layer (36) comprising liquid crystals provided on the light guide (30) at the exit surface (16) side thereof, and
- a first electrode (40) and a second electrode (44) both having electrical contact with the birefringent layer (36), wherein
- a voltage is applied between the first and the second electrode (40, 44), which voltage provides the desired direction of the polarized light coupled out via the exit surface (16).

13. (original) A method according to claim 12, further comprising the use of an exit surface (316) that is divided into separate regions (350, 360), each being provided with a dedicated set of first and second electrodes (352, 354, 362, 364), and

the application of an individual voltage for the set of electrodes (352, 354, 362, 364) of each region (350, 360) for providing a desired and individual direction of the light coupled out from that particular region (350, 360).